Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

				
pplicant's or agent's file reference 0151268 FOR FURTHER ACTION SeeNotification of Transmittal of International Proximation Report (Form PCT/IPEA/416)				
International application No. PCT/JP01/05525	International filing date (day/month/year) 27 June 2001 (27.06.01)	Priority date (day/month/year)		
International Patent Classification (IPC) or n G09C 1/00	ational classification and IPC			
Applicant	FUЛTSU LIMITED	*		
This international preliminary exami and is transmitted to the applicant ac	nation report has been prepared by this Internction to Article 36.	national Preliminary Examining Authority		
2. This REPORT consists of a total of	5 sheets, including this cover s	heet.		
amended and are the basis for	ed by ANNEXES, i.e., sheets of the description this report and/or sheets containing rectifical Administrative Instructions under the PCT).	on, claims and/or drawings which have been tions made before this Authority (see Rule		
These annexes consist of a tot	al of sheets.			
3. This report contains indications relat	ing to the following items:			
I Basis of the report				
II Priority				
III Non-establishment of	f opinion with regard to novelty, inventive ste	p and industrial applicability		
IV Lack of unity of invention				
Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;				
VI Certain documents cited				
VII Certain defects in the international application				
VIII Certain observations	on the international application			
Date of submission of the demand	Date of completion of	this report		
19 October 2001 (19.10	.01) 04 Å	04 April 2002 (04.04.2002)		
Name and mailing address of the IPEA/JP	Authorized officer	Authorized officer		
Pacsimile No.	Telephone No.	Telephone No.		

Form PCT/IPEA/409 (cover sheet) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP01/05525

I. Basis of the report					
1. With	regard to the elements of the international application:*				
	the international application as originally filed	3.			
	the description:	. *			
	pages	, as originally filed			
	pages	, filed with the demand			
	pages, filed with the letter of				
	the claims:				
	pages	, as originally filed			
	pages, as amended (together with any sta				
	pages	, filed with the demand			
	pages, filed with the letter of				
	the drawings:				
	pages	, as originally filed			
	pages				
	pages, filed with the letter of				
l. 🗖	the sequence listing part of the description:				
	pages	as originally filed			
	pages				
	pages, filed with the letter of				
the i	regard to the language, all the elements marked above were available or furnished to this Authority international application was filed, unless otherwise indicated under this item. The elements were available or furnished to this Authority in the following language the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). The language of publication of the international application (under Rule 48.3(b)). The language of the translation furnished for the purposes of international preliminary examination or 55.3).	which is:			
3. With	n regard to any nucleotide and/or amino acid sequence disclosed in the international application minary examination was carried out on the basis of the sequence listing:	cation, the international			
닏	contained in the international application in written form.				
님	filed together with the international application in computer readable form.				
님	furnished subsequently to this Authority in written form.				
片	furnished subsequently to this Authority in computer readable form.				
	The statement that the subsequently furnished written sequence listing does not go beyond international application as filed has been furnished.	the disclosure in the			
	The statement that the information recorded in computer readable form is identical to the writt been furnished.	en sequence listing has			
4.	The amendments have resulted in the cancellation of:				
	the description, pages				
	the claims, Nos.				
	the drawings, sheets/fig				
5. 🔲	This report has been established as if (some of) the amendments had not been made, since they have beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	e been considered to go			
in th	acement sheets which have been furnished to the receiving Office in response to an invitation under A is report as "originally filed" and are not annexed to this report since they do not contain as 0.17).	rticle 14 are referred to mendments (Rule 70.16			
	eplacement sheet containing such amendments must be referred to under item 1 and annexed to this re	port.			

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP01/05525

III. Non-	III. Non-establishment of opinion with regard t novelty, inventive step and industrial applicability				
1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:					
	the entire international application.				
\boxtimes	claims Nos				
becaus	se:				
\boxtimes	the said international application, or the said claims Nos				
The subject matters of claims 19-28 are programs to be executed by computers, and do not use any hardware resource during the execution. Therefore, since they merely describe an idea expressing a program source, they relate to a mere presentation of information, which does not require an international preliminary examination by the International Preliminary Examining Authority in accordance with PCT Article 34(4)(a)(i) and Rule 67.1(v).					
·					
	the description, claims or drawings (indicate particular elements below) or said claims Nosare so unclear that no meaningful opinion could be formed (specify):				
	in the meaning and opinion could be formed (specify).				
	·				
	the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed.				
	no international search report has been established for said claims Nos				
2. A meaningful international preliminary examination cannot be carried out due to the failure f the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C f the Administrative Instructions:					
	the written form has not been furnished or does not comply with the standard.				
_	the computer readable form has not been furnished or does not comply with the standard.				

International application No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP01/05525

atement			
Novelty (N)	Claims	1-18, 29-38	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-18, 29-38	NO
Industrial applicability (IA)	Claims	1-18, 29-38	YES
	Claims		NO

2. Citations and explanations

Claims 1-12 and 29-35

Document 1: JP, 10-247949, A (Nippon Telegraph and Telephone Corp.), 14 September, 1998 (14.09.98), page 3, column 3, lines 26-32, page 5, column 7, lines 25-42, page 5, column 8, lines 27-48, page 5, column 8, lines 42-48, Figs. 1-12

describes an information processing method, in which (1) an electronic mail and the signature of the sender for the said electronic mail are received from a computer terminal, (2) in the case where the signature has been successfully authenticated, the said electronic mail is converted in a medium that is suitable for the receiver, (3) facsimile image data containing a sending address is produced, and (4) the said facsimile image data is transmitted.

Document 2: JP, 2000-338868, A (NTT Data Corp.), 8 December, 2000 (08.12.00), page 4, column 5, lines 2-37, page 4, column 6, line 39 to page 5, column 7, line 28, page 7, column 12, line 11 to page 8, column 14, line 21, Figs. 1-8

describes a technique, in which signature data is produced for use as a signature covering the basic information converted into another format, to allow authentication also after conversion into the other format.

Document 3: JP, 2000-232442, A (NTT Data Corp.), 22 August, 2000 (22.08.00), page 3, column 4, lines 37-43, page 4, column 5, lines 7-30, Figs. 1-5

describes a technique, in which an authentication program necessary for signature authentication is also distributed to authentication devices.

It is considered to be obvious for a person skilled in the art, to employ the technique of converting also the format of signature data described in document 2, in the information processing method described in document 1, to allow the signature data to be authenticated also on the receiver side after format conversion, in order to avoid the possible inconvenience caused to a data sender or receiver by a falsified message. It is also considered to be obvious for a person skilled in the art as described in document 3, to distribute the program necessary for signature authentication. Furthermore, it is considered to be obvious for a person skilled in the art, to implement an information processing method as a computer system.

Claims 13-18 and 36-38

Document 4: "Introduction to Theory of Cryptography (in Japanese)," (Eiji Okamoto), 25 February, 1993 (25.02.93), Kyoritsu Shuppan K.K., Initial Edition, First Impression, pages 129-131 describes a method of checking an identifier prepared by using a hash function, for authentication, as a technique for confirming the authenticity of a message.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCTJP01/05525

Sup	nle	men	tal	Rox
Dun				$\mathbf{p}_{\mathbf{q}}$

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V.2

It is considered to be obvious for a person skilled in the art, to employ the technique of converting also the format of signature data described in document 2, in the information processing method described in document 1, to allow the signature data to be authenticated also on the receiver side after format conversion, in order to avoid the possible inconvenience caused to a data sender or receiver by a falsified message. Furthermore, it is a well-known commonly used technique described in document 3, to distribute the program necessary for signature authentication, and it is also a well-known commonly used technique described in document 4, to use a method of checking an identifier prepared by using a hash function, as a method of realizing signature authentication. So, employing these techniques is considered to be obvious to a person skilled in the art. Moreover, it is considered to be obvious for a person skilled in the art, to implement an information processing method as a computer system.

Form PCT/IPEA/409 (Supplemental Box) (July 1998)